Amendments to the Claims

Claims 1-16 (Cancelled)

Claim 17 (Original): A method for determining an amount of energy released by a thermally responsive snap-action bimetallic disc, the method comprising:

forming a bimetallic disc having a mobile center portion surrounded by a substantially immobile peripheral portion;

qualifying an energy released by transit of the mobile portion from a first side of the peripheral portion to a second opposite side of the peripheral portion during operation of a snap action; and

subsequently assembling the disc into operative relationship with a movable indicator portion of a sensing device.

Claim 18 (Original): The method of claim 17 wherein qualifying the released energy includes thermally activating the disc in the presence of a force sensing device.

Claim 19 (Original): The method of claim 18 wherein qualifying the released energy further includes moving the mobile portion of the disc into contact with an operational portion of the force sensing device during transit of the mobile portion from the first side to the second side of the peripheral portion.

Claim 20 (Original): The method of claim 19 wherein thermally activating the disc includes one of heating and cooling the disc.

Claim 21 (Original): The method of claim 19 wherein qualifying the released energy includes determining a minimum force applied to the operational portion of the force sensing device during transit of the mobile portion of the disc.

Claim 22 (Original): The method of claim 19 wherein qualifying the released energy includes thermally activating the disc at a controlled rate of temperature change.

Claim 23 (Original): The method of claim 22 wherein qualifying the released energy includes thermally activating the disc at a plurality of different controlled rates of temperature change.

Claims 24-44 (Cancelled)

Claim 45 (New): A method for determining an amount of energy released by a thermally responsive snap-action bimetallic actuator, the method comprising:

initially qualifying an energy released by transit of a center portion of a thermally responsive snap-action bimetallic actuator surrounded by a peripheral portion from a first side of the peripheral portion to a second opposite side of the peripheral portion during operation of a snap action;

subsequently presenting a thermally responsive snap-action bimetallic actuator to a sensing portion of a force sensing device while the actuator is configured in a first pre-snap state wherein the center portion of the actuator is spaced away from the sensing portion of the force sensing device; and

determining a force generated by the actuator during transit to a second post-snap state wherein the center portion of the actuator is moved into forceful contact with the sensing portion of the force sensing device.

Claim 46 (New): The method of claim 45 wherein presenting the actuator to the sensing portion of the force sensing device includes thermally activating the actuator to transit to the second post-snap state.

Claim 47 (New): The method of claim 45 wherein presenting the actuator to the sensing portion of the force sensing device includes supporting the peripheral portion of the actuator.

Claim 48 (New): The method of claim 45 wherein determining a force generated by the actuator includes detecting a peak force generated by moving the center portion of the actuator into forceful contact with the sensing portion of the force sensing device.

Claim 49 (New): The method of claim 45 wherein presenting the actuator to the sensing portion of the force sensing device includes positioning the actuator in proximity to a thermal stage, and activating the thermal stage.

Claim 50 (New): The method of claim 49 wherein activating the thermal stage includes activating the thermal stage in a controlled manner.

Claim 51 (New): The method of claim 50 wherein determining a force generated by the actuator includes determining an energy-temperature rate relationship exhibited by the actuator.

Claim 52 (New): The method of claim 51, further comprising assembling the actuator into operative relationship with a movable indicator portion of a thermal sensing device.

Claim 53 (New): A method for determining a an amount of energy released by a thermally responsive snap-action bimetallic disc during a snap action of the bimetallic disc, the method comprising:

qualifying an energy released by motion of a first portion of a thermally responsive snap-action bimetallic disc relative to a second portion of the bimetallic disc during operation of a snap action of the bimetallic disc;

after qualifying the energy released, presenting the thermally responsive snap-action bimetallic disc to a force indicator on a support structure while the first portion of the disc is positioned on one side of the second portion opposite from the force indicator, the disc being presented sufficiently closely to the force indicator that the first portion is positioned to forcefully interact with a sensing portion of the force indicator during motion of the first portion of the bimetallic disc relative to the second portion ;

changing a temperature of the disc to transit the first portion into a position on the second side of the second portion proximate to the force indicator; and

sensing with the sensing portion of the force indicator a peak force generated by the motion of the first portion.

Claim 54 (New): The method of claim 53 wherein changing the temperature of the disc includes changing a temperature of the support structure.

Claim 55 (New): The method of claim 53 wherein changing the temperature of the disc includes changing the temperature at a controlled rate.

Claim 56 (New): The method of claim 53 wherein the temperature of the disc is below an actuation temperature of the disc prior to changing.

Claim 57 (New): The method of claim 56 wherein changing the temperature of the disc includes increasing the temperature above the actuation temperature.

Claim 58 (New): The method of claim 53 wherein presenting the disc to the force indicator on a support structure includes simulating a portion of a structure intended to support the disc during operation in a temperature sensing device.

Claim 59 (New): The method of claim 53 wherein changing a temperature of the disc to transit the first portion into a position on the second side of the second portion proximate to the force indicator includes generating a force with the motion of the first portion of the disc relative to the second portion.

Claim 60 (New): The method of claim 59 wherein sensing a peak force generated by the disc includes applying the force generated by the disc to the sensing portion of the force indicator.